

# Time Series Analyzer - Version 1.1.0 - changes

Josef Pirkl - TimeSeriesAnalyzer@gmail.com

11/2011 - 01/2012

---

## Added new „Box-Jenkins“ page

- Added „PACF (partial autocorrelation)“.
- Into ACF and PACF added significance limit.
- Added AR(1) – AR(5).
- Added MA(1) – MA(5).
- Added ARMA(1..3, 1..3).

## Triple Holt-Winters exponential smoothing

- Added into TIME SERIE project with seasonal.

## Model description

- For models (regression, AR) added „Output (model)“ item into Graph context menu. It is possible generate text information about model parameters estimation. The output is can be send directly to printer too.

## Modelling

- Added new **AIC Akaike`s information criteria** for best model selection.
- Added new **AICc Akaike`s information criteria-corrected** for best model selection.
- Added new **BIC Bayesian information criteria** for best model selection.

## Changes in Summary page

- New system in „**Best model (single criteria)**“ page. More criteria are visible together.
- Into „**Best model (single criteria)**“ comparing added „AR process“.

### Changes in “Settings” dialog

- On „Calc“ page is now enabled checking sections/areas for computing. You can disable computing of „time-slow“ model.

### Others

- Into „**Exponential sections settings**“ dialogs was added new checkbox „**Only one model**“ for generating only one model by its first alpha (beta, gama) smoothing factor(s).
- „**Maximum depth for ACF calc**“ was increased to 40.
- Into „Settings“ dialog, page „Graph -> Series appearance“ added new serie type „Significance limit“.
- ACF removed from „Base“ page, moved into „Box-Jenkins“ page.
- Print font height type changed from INT to DOUBLE. Print height decreased to 3.5 mm (from 4 mm).
- Into every original graph`s toobar in Graphbox was added new button “Info”. This button is active for some GraphBox only and it is used for fast moving into appropriate “Summary” page.
- Into „Data serie selection“ dialog was added new edit box „Locate“ for fast finding data serie.
- Measures of accuracy (for example MSE) are now computed for series with NULL value too. NULL values are not included into record count.
- Into graph context menu added new option „-> **new DATA project..**“. This option create new data project with data from active time serie – data serie is automatically detected, no dialog is shown, very fast.
- New graphical logo (text).
- Selected of text stayup window is not hidden now.

- Into „Text“ dialog context menu added new option „Print..“.
- Decimal number count increased to 4.
- „Data serie selection“ dialog – „Not null“ checkbox value changed to FALSE.
- Into „Compare“ dialog, residual graph, added zero axis.
- Into „Make TIME SERIE“ dialog added new „Settings“ button for settings current project before its creation.
- Added new „Settings – ARMA model“ dialog for possibility of custom AR, MA, ARMA coefficients.
- Into „Settings“ dialog added new option for „Default..“ button – option for remove custom AR, MA, ARMA coefficients.
- For some model sections added new button „Go to summary page“ for fast move to „Summary page“.

### Bugs

- Removed error in web update, when does not exists Web update manager.
- Better support for clipboard paste in DATA project for one cell value.
- Better adjustment normal distribution curve into histogram.
- Repaired bug in regression formula (for first negative coefficient mised minus).
- Repaired displayed formula in Logistic regression.